

THERMAL INTERFACE ADHESIVE
ABSTRACT OF THE DISCLOSURE

A thermally conductive interface adhesive for attaching an electronic component, such as an integrated circuit chip, to a heat receiving substrate, such as a heat spreader, is disclosed. The interface adhesive comprises a mixture of solder powder, flux and a curable polymer, such as an epoxy, which form a paste. Preferably, the interface adhesive further comprises particles of a metallic filler material, such as silver or copper. Preferably, the solder has a relatively low melting point, and the polymer is thermosetting. After the adhesive paste is applied it is processed by heating it to melt the solder after which the polymer is cured, such that a metallic network is formed within the adhesive layer. The cured adhesive layer has a thermal conductivity of about 15W/m-K or more.